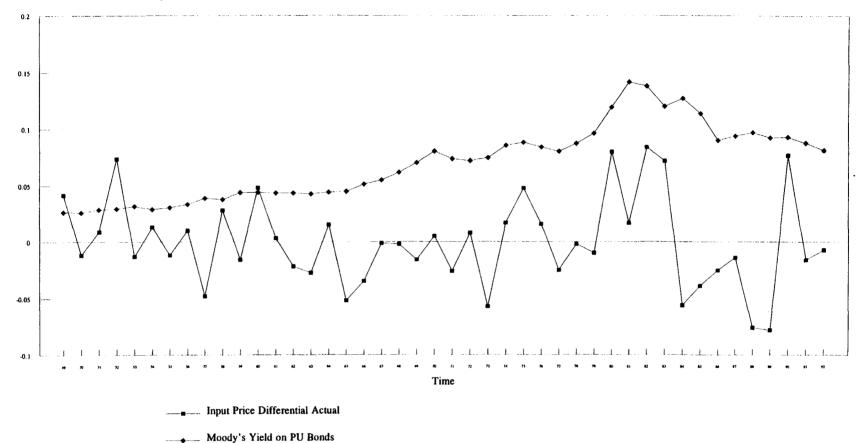
Input Price Differential & Moody' Yield on PU Bonds



Sources: USTA Ex Parte, February 1, 1995, Christensen Affidavit

Moody's Yield on Public Utilty Bonds is from the Economic Report of the President, 1994.

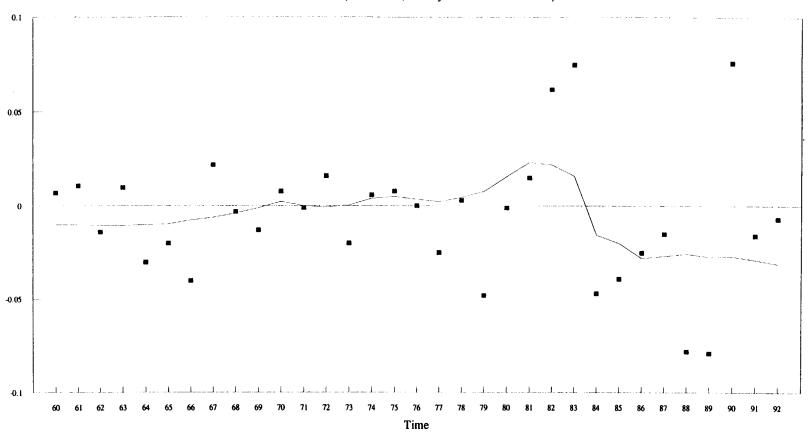
Regression: Input Price Differential (NERA Data)

		LEC-US		Moody's	Regression Output:			
		Input	Divestiture	Yield	Constant	Ū	•	-0.0251
		Price		Public	Std Err of Y	Est		0.0327
		Growth		Utility	R Squared			0.1848
				Bonds	No. of Obser	vations		33
	1960	0.70%	0	4.41%	Degrees of F			30
	1961	1.10%	0	4.35%			Divestiture	Moody
	1962	-1.40%	Ō	4.33%	X Coefficien	t/s)	-0.0338	0.3419
1	1963	1.00%	0	4.26%	Std Err of Co		0.0135	0.2200
ŀ	1964	-3.00%	0	4.40%			0.07.00	0.2200
1	1965	-2.00%	0	4.49%	t-statistic		-2.4935	1.5543
÷	1966	-4.00%	0	5.13%				
!	1967	2.20%	0	5.51%	F-statistic	3.400	1	
	1968	-0.30%	0	6.18%	df(2,30)		•	
	1969	-1.30%	Ō	7.03%				
	1970	0.80%	0	8.04%				
	1971	-0.10%	0	7.39%				
	1972	1.60%	0	7.21%				
	1973	-2.00%	0	7.44%				
	1974	0.60%	0	8.57%				
i	1975	0.80%	0	8.83%				
i	1976	0.00%	Ō	8.43%				
:	1977	-2.50%	0	8.02%				
	1978	0.30%	0	8.73%				
	1979	-4.80%	0	9.63%				
:	1980	-0.10%	0	11.94%				
	1981	1.50%	0	14.17%				
	1982	6.20%	0	13.79%				
	1983	7.50%	0	12.04%				
	1984	-4.70%	1	12.71%				
	1985	-3.90%	1	11.37%				
	1986	-2.50%	1	9.02%				
	1987	-1.50%	1	9.38%				
	1988	-7.80%	1	9.71%				
1	1989	-7.90%	i	9.26%				
!	1990	7.60%	1	9.32%				
	1991	-1.60%	ì	8.77%				
	1992	-0.70%	1	8.14%				
Ava	60-84	-0.1%						
	60-92	-0.6%						
	85-92	-2.3%						

Sources: NERA US Input Prices (1960-1992), USTA Ex Parte, January 13, 1995
NERA Telecom Input Prices 1960 -1984, USTA Ex Parte, January 13, 1995
LEC Input Price Growth, 1993 Data Point TFP Update 1985-1992, USTA Ex Parte, February 1, 1995

Input Price Differential

Estimate = f(Divestiture, Moody's Yield on PU Bonds)



Actual

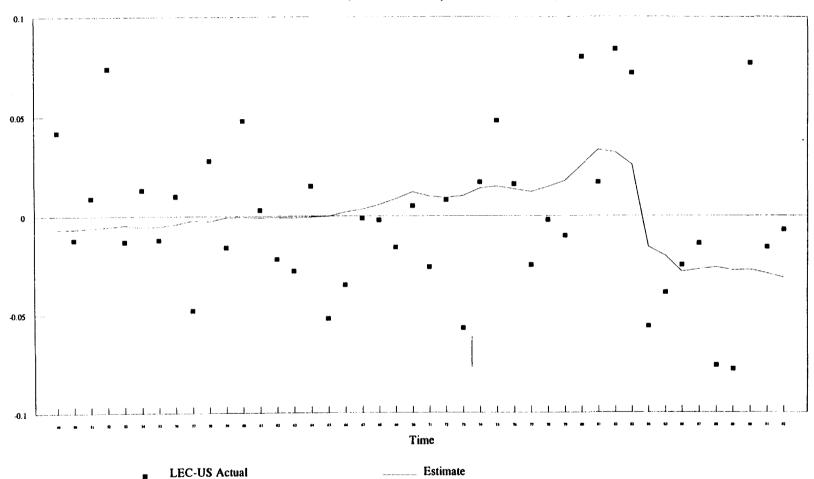
____ Estimate

Sources: NERA US Input Prices (1960-1992), USTA Ex Parte, January 13, 1995 NERA Telecom Input Prices (1960-1984), USTA Ex Parte, January 13, 1995 LEC Input Price Growth (1985-1992), 1993 Data Point Update, USTA Ex Parte, February 1, 1995

and Growd

Regression: Input Price Differential (Christensen Affidavit)

		EC-US		Moody's				
Year	obs	Input		Yield on		Regression Output:		
		Price		Public U	Constant		-0.015	
		Growth	Divestiture		Std Err of Y Est		0.037	
1949	1	4.20%	0	2.66%	R Squared		0.170	
1950	2	-1.20%	0	2.62%	No. of Observati	ons	4	
1951	3	0.90%	0	2.86%	Degrees of Free	moi	4	
1952	4	7.40%	0	2.96%		Divestiture	Moody	
1953	5	-1.30%	0	3.20%	X Coefficient(s)	-0.0440	0.346	
1954	6	1.30%	0	2.90%	Std Err of Coef.	0.0155	0.194	
1955	7	-1.20%	0	3.06%				
1956	8	1.00%	0	3.36%	t-statistic	-2.8330	1.781	
1957	9	-4.80%	0	3.89%				
1958	10	2.80%	0	3.79%	F-statistic 4.2	036		
1959	11	-1.60%	Ō	4.38%	df (2,41)			
1960	12	4.80%	ō	4.41%				
1961	13	0.30%	Ö	4.35%				
1962	14	-2.20%	ő	4.33%				
1963	15	-2.80%	ő	4.26%				
1964	16	1.50%	ő	4.40%				
1965	17	-5.20%	Ö	4.49%				
1966		-3.50%	Ö	5.13%				
	18		0	5.51%				
1967	19	-0.10%						
1968	20	-0.20%	0	6.18%				
1969	21	-1.60%	0	7.03%				
1970	22	0.50%	0	8.04%				
1971	23	-2.60%	0	7.39%				
1972	24	0.80%	0	7.21%				
1973	25	-5.70%	0	7.44%				
1974	26	1.70%	0	8.57%				
1975	27	4.80%	0	8.83%				
1976	28	1.60%	0	8.43%				
1977	29	-2.50%	0	8.02%				
1978	30	-0.20%	0	8.73%				
1979	31	-1.00%	0	9.63%				
1980	32	8.00%	0	11.94%				
1981	33	1.70%	0	14.17%				
1982	34	8.40%	0	13.79%				
1983	35	7.20%	0	12.04%				
1984	36	-5.60%	1	12.71%				
1985	37	-3.90%	1	11.37%				
1986	38	-2.50%	1	9.02%				
1987	39	-1.40%	1	9.38%				
1988	40	-7.60%	1	9.71%				
1989	41	-7.80%	1	9.26%				
1990	42	7.70%	1	9.32%				
1991	43	-1.60%	1	8.77%				
1992	44	-0.70%	1	8.14%				
	•	·-						
vg 49-92		-0.05%						
vg 49-84		0.4%						
vg 84-92		-2.6%						



Source: USTA Ex Parte, February 1, 1995, Christensen Affidavit

STATEMENT OF COMMISSIONER JAMES H. QUELLO

Re: Price Cap Performance Review for Local Exchange Carriers

Mr. Chairman, today's vote on a revised LEC price cap plan is perhaps the single most important common carrier policy decision this Commission will have made during your Chairmanship. Therefore, I feel I must first begin by expressing my profound appreciation to the staff in the Common Carrier Bureau who have worked so incredibly hard under the most difficult conditions to bring this matter to closure. In particular, I wish to say that the valuable contributions of Kathy Wallman and Richard Metzger have only reinforced the tremendous respect I already have for their intelligence, knowledge, and dedication. I am sure my fellow Commissioners all join me in thanking you for the tremendous effort it took to bring this item forward for our consideration today.

Now, a brief perspective on what we will do today, and what we will not. What we will do is adopt an interim plan that has two principal functions. Its first, and most immediate function, is to revise and restructure the Commission's original price cap plan to reflect the goals we feel are important today in any system of price regulation of local telephone companies. The interim price cap plan before us attempts to balance the competing interests of consumers, local and long distance carriers, for whatever interim period this plan will be in effect.

And that leads to the second, perhaps more important function, of this plan. This interim plan also provides a template for a permanent plan which, I hope, will be structured not simply to replicate the effects of competition, but also to encourage the growth of competition and to recognize its effects as it takes hold. For the twenty years I have served on this Commission we have repeatedly, in every regulatory area entrusted to us, stressed the preferability of competition to regulation as a means of enhancing consumer welfare. After twenty years of experience, I happen to believe it. And after several months of intensively grappling with this proceeding, I am more convinced than ever that any form of rate regulation, however sophisticated, however necessary, comes in a poor second to competition. For this reason, I will look forward to framing our permanent price cap plan in such a way that, by incenting competition, it can bring about its own demise.

Now, for my view of what we have not done today. We have not structured an interim plan that elevates any one policy goal - be it encouraging the deployment of advanced networks, or lowering access charges, or lowering consumer phone bills, or maximizing LEC efficiency - to a preeminent place over all the others. Rather, we have attempted to balance these differing policy objectives. For today, I am satisfied with the balance we strike. Is it perfect? No; few regulatory balancing acts or contentious items ever are. But is it fair and forward-looking? To this I answer yes; and on this basis I will vote to adopt it.

SEPARATE STATEMENT OF COMMISSIONER ANDREW C. BARRETT

RE: Price Cap Performance Review for Local Exchange Carriers; First Report and Order (CC Docket No. 94-1)

In this First Report and Order, the Commission adopts an interim price cap plan adjusting the current plan to allow local exchange carriers (LECs) to choose from among three "productivity factors" set at 4.0, 4.7 and 5.3 percent, which will serve as an offset to the inflation-based increase that LECs are permitted to make to their rates each year. LECs that choose either of the lower two productivity factor options will remain subject to "sharing" obligations that, as in the current plan, limit their ability to retain earnings in excess of specified rates of return. Those companies that elect the highest step, with a productivity of 5.3 percent, will incur no sharing obligation. Based on the respective sharing obligations, companies electing the 4.0 percent lower option will be limited to an effective rate of return of 12.75 percent; companies electing the 4.7 percent middle option will be limited to an effective rate of return of 14.25 percent. The interim plan also requires the companies to reinitialize, or recalculate their Price Cap Index downward on a one-time basis by up to 2.8 percent, or .7 percent for each of the past four years in which the LEC elected the 3.3 percent productivity factor under the current plan, which the Commission adopted in 1990.

I have supported a move beyond the current price cap mechanism for a considerable time, with a particular interest in facilitating movement toward a regulatory framework (or the elimination of) that will more realistically reflect the telecommunications industry's unique and rapidly changing structure, costs, and investment needs. Any new price cap mechanism should be founded on two fundamental assumptions: (1) the individual LECs are less alike due to unique market developments and resulting strategies, and (2) the industry is dynamic, and therefore, should not be regulated by a static price cap mechanism that changes only through a full review by the Commission. At the same time, I am concerned that the regulatory mechanism must provide incentives for telephone companies to invest in more risky endeavors in the marketplace while requiring that these companies bear the burdens associated with the increased risks rather than subsidizing the new endeavors at the expense of customers who do not want such services. I also have been convinced for some time that the complexity of our costing and other procedures, which are based in the current price cap mechanism, will not be able to cope with sweeping changes in technology and market structures. Clearly, as more communications companies are transporting broadband and video along with existing voice services, and once

¹ See "Beyond Price Caps: Escaping the Traditional Regulatory Framework", delivered by Commissioner Andrew C. Barrett to Florida Economic Club, August 27, 1992 ("Beyond Price Caps").

² See "Beyond Price Caps".

³ See "Beyond Price Caps".

wireless services are used extensively for local access, the allocation of costs will have less meaning than it does today.

I vote in favor of this decision, notwithstanding certain public policy concerns, because of several important aspects of the interim price cap mechanism that will distance the Commission from the certain vestiges embodied in the current price cap mechanism, while also providing local exchange carriers with greater choices or flexibility than the current price cap mechanism. Most significantly, this interim price cap mechanism accommodates the industry's heterogeneity. Given the different results and performance by LECs under price caps between 1990 and 1994, a greater degree of choice is necessary for LECs that have demonstrated lower earnings in the past. as well as those companies generating comparatively high productivity rates that are now constrained by sharing requirements in the current price cap plan. With respect to the combinations of productivity factors and sharing mechanisms, the interim mechanism applies three options rather than the two options in the current price cap plan. I believe that three options may increase the choices available to LECs, minimizing the opportunity for skewed incentives or unintentionally forced choices by LECs that might occur as a result of maintaining only two choices. Furthermore, the greater number of options will help to reflect more accurately the stratified differences created by past choices and performances among LECs, as companies have demonstrated a variety of earnings, rates, and choices for productivity factors. Therefore, these productivity and sharing options will help to signal the form of a future price cap mechanism. To the extent that this interim decision leaves a number of issues unresolved, the increased opportunity for choice also may mitigate some of the resulting uncertainty, especially to the extent that the interim or transition period is extended.

This price cap mechanism also continues some (albeit too slow) movement away from rate-of-return regulation. Most significantly, this mechanism provides LECs with the opportunity to completely eliminate their sharing obligations. As a LEC reaches the 5.3% high productivity factor, its sharing obligation is totally eliminated. Accordingly, this plan may encourage companies to move from the lower to middle productivity factor, or from the middle productivity factor to the higher level, by providing an opportunity for a LEC to reduce or eliminate its sharing requirement if it is able to make efficiency or productivity gains. In this regard, it has been my objective to establish three sufficiently distinct and attainable options for productivity factor and sharing combinations so that companies will have a realistic incentive to move beyond the lower step into the middle and higher levels.

With respect to the practical impact of the adjustments to the price cap structure as a result of this interim mechanism, I believe it is important to highlight other elements of flexibility incorporated into this decision. First, it is important that the reinitialization applies to the price cap index, and thus does not necessarily require a reduction in rates by each LEC. For instance, companies that already have been pricing below their index and companies that previously selected the higher 4.3% productivity offset in the current mechanism will incur lesser one-time adjustments. This decision also extends the lower pricing bands that apply to the service categories within the traffic sensitive and trunking baskets by five percent to allow LECs additional downward pricing flexibility.

Furthermore, this decision reflects a step toward adopting a permanent measure of

industry productivity, such as a determination of Total Factor Productivity (TFP). In taking this step, it is important to note that the record in this proceeding has been based on analyses of several thorough models for calculating productivity, including AT&T's "direct model." To the extent that the arguments raised by various parties have demonstrated a wide range of views regarding the appropriate process for establishing data for productivity and earnings and identifying an analytically sound methodology for estimating productivity, the respective productivity models provided both an important basis for this interim mechanism and an opportunity to progress toward a mechanism with a more refined statistical or econometric foundation.

I also view this decision on the LEC price cap mechanism with several fundamental policy concerns that I hope the Commission will be able to address in the remaining aspects of this proceeding. Most fundamentally, I would have preferred that this decision provide a greater measure of certainty to the industry, the financial community, and consumers by establishing a permanent plan. The use of an interim price cap mechanism, by definition, could exacerbate the uncertainty surrounding LEC operations and investment. The "interim" mechanism also could become, in effect, a permanent or long term mechanism by virtue of the duration of the interim or transition period. Even if the Commission is able to resolve the remaining issues in this proceeding, this interim mechanism will have a significant public policy role in determining the permanent mechanism. Therefore, I am especially concerned about the manner in which the limits in establishing this interim mechanism will necessarily influence the Commission's decisions in the future.

The Commission's January 1994 Notice of Proposed Rulemaking sought comment on a number of "baseline" issues regarding current levels of access rates based on the structure of the current price cap mechanism. The Notice also raised broad or "transitional" issues regarding the treatment of various services as they become subject to increased levels of competition. It is my opinion, however, that the focus by many parties in this proceeding unfortunately has been limited to specific baseline issues of determining a productivity factor, the sharing requirements, and a "reinitialization" of rates, and has contributed to restricting the opportunity to address the complete price cap mechanism.

Presently, I do not believe that we are at a point where the public can totally rely on market forces to set prices for all services, especially with respect to services provided to residential areas. I do believe that rapid changes in the local exchange marketplace will underscore the importance of transitioning toward a streamlined regulatory structure where sources of competition are evident in the local marketplace. Thus, I would have preferred to begin or, at a minimum, prepare for the transition, where possible for specific services by: (1) reducing the Commission's link between prices and earnings on a rate base, and (2) allowing more pricing flexibility based on a correlation to cost in markets where competition has

⁴ Comments of United States Telephone Association, CC Docket No. 94-1.

⁵ See, e.g., Comments filed in CC Docket No. 94-1 by AT&T, Ad Hoc Telecommunications Users Committee, and MCI.

developed.⁶ Nonetheless, it remains imperative to develop specific criteria for identifying competition for particular services, despite certain comments in this proceeding,⁷ as well as to establish thresholds that might trigger the transitional regulatory mechanisms. Therefore, I am troubled that it remains necessary to devote significant attention to developing a streamlined approach to the baskets and bands in the current price cap mechanism in a manner that will allow specific services to be removed as they become subject to competition, without initiating a full review of the entire price cap mechanism.

In the context of continuing this broad review of the price cap mechanism, I also observe that today's decision raises the need to review access charges more completely, especially to the extent that these funds are a basis for subsidizing universal service. Thus as access charges decline, the Commission must review the policy goals and means of promoting universal service in general terms, rather than a more narrow review of high cost assistance to LECs.

Additionally, I would have preferred to establish generally lower levels for the productivity factors in this interim price cap mechanism. With respect to the 4.0% lower productivity factor, I am concerned that certain companies that have demonstrated lower productivity in the past, and therefore lower earnings, especially smaller LECs or companies that will consider whether to elect to operate under price caps, may not sustain this level of productivity. Likewise, it is also conceivable that companies facing greater levels of competition may find it more difficult to sustain even this lower level of productivity. In order to address these instances, this decision's provision for greater downward pricing flexibility in the traffic sensitive and trunking baskets may provide a measure of relief, and it is necessary, therefore, to resolve the remaining transitional issues with respect to further elements of pricing flexibility. Regarding the 5.3% higher level of productivity, I also am interested in whether we have provided a realistic incentive for companies to move to this option in order to attain the benefits derived from eliminating sharing, especially to the extent that companies may question the likelihood of sustaining this level of productivity.

Finally, this proceeding has involved extremely complex analytical work and public policy decisions, and I acknowledge the outstanding dedication shown by our Commission staff, my colleagues, and their respective staffs.

⁶ See, e.g., Comments of GTE.

⁷ See, e.g., NYNEX Comments on USTA Proposal; see also NYNEX ex parte statement, March 3, 1995.

DISSENTING STATEMENT OF COMMISSIONER SUSAN NESS

RE: Price Cap Performance Review for Local Exchange Carriers (CC Docket No. 94-1)

I regretfully but resolutely dissent. In my judgment, the ruling adopted today underestimates the ability of local telephone companies to increase the efficiency of their operations and shortchanges the interests of consumers.

Four years ago, when price cap regulation for local telephone companies was initiated, the Commission's stated objective was that "[i]ncentive regulation will reward companies that become more productive and efficient, while ensuring that productivity and efficiency gains are shared with ratepayers." The Commission committed to a comprehensive review during the fourth year of the price cap regime and to make any necessary adjustments.

The promised review has been underway for more than a year. Today's ruling is the interim – and, in my view, less than satisfactory – result of our efforts.

<u>Introduction</u>. To review and revise our price cap rules presents us with formidable challenges. Even if we confine one stage of the effort to certain interim adjustments, the task of establishing new productivity factors and sharing rules requires us to evaluate complex evidence that is subject to conflicting interpretations. Each of us must make independent judgments on the record as we understand it.

My own conclusion is that today's ruling materially underestimates the productivity gains that can reasonably be expected of the large telephone companies. This miscalculation will lead directly to interexchange carriers paying more than they should for interstate access services, and indirectly to similarly adverse impacts on consumers. As a result, the Commission's ruling sends the wrong message to the local and long distance carriers, to the state regulators with whom we share responsibility for oversight of the telephone companies, and to the American public.

Today the Commission acknowledges that the productivity factors prescribed in 1990 were significantly and erroneously low. Through the "reinitialization" of price cap indices we ensure that this error – to the extent it is now being corrected – will not be compounded in future years. Yet, even with this experience, the Commission adopts overly modest productivity goals for the coming year or two, thereby setting the stage for future overearnings and future reinitializations.

Overlaid on these problems are the drawbacks of the Commission's decision to restructure the sharing options. Although the interim plan is intended simply as a short-term measure pending completion of the current rulemaking, the Commission now concludes that price cap companies should have three X-Factor options rather than two.

The consequence of these features of our interim plan is to reduce consumer benefits, increase uncertainty in the marketplace, and add unnecessary complexity to the framework. A far better approach would have been to change the structure less and the numbers more.

<u>Unnecessary Complexity</u>. I disagree with the decision to replace the present two-option model with a three-option model during this stage of the rulemaking. The drawbacks of this approach have not been adequately considered. A three-option model adds needless complexity and "churn," particularly in light of the brief expected life of this interim plan and the inability of any Commissioner to know, at this juncture, how many options will be included in the long-term structure to be formulated in the next phase of this proceeding.

In light of the potential disruption, I do not regard it as prudent to adopt such a significant change in the structure of the price cap regime at a time when we are not yet ready to settle upon a long-term plan. And I fear that the untested economic logic of a three-option model may impel carriers to hold back from reaching for the high option, the only one that eliminates the vestiges of rate-of-return regulation. To the extent we discourage carriers from pursuing the no-sharing option, we have lost an opportunity to move away from reliance on cost-accounting strictures and other trappings of traditional common carrier regulation.

<u>Inadequate Productivity Expectations</u>. More troublesome than the number of options are the specific X-Factors associated with the options, especially the low-option X.¹ The new productivity factors are more aggressive than those in the current plan, but insufficiently so. Considerably greater productivity gains are readily attainable, particularly in light of the pace at which telecommunications technologies are advancing.

The order establishes three options: a low option now fixed at 4.0 percent, a middle option of 4.7 percent, and a high option of 5.3 percent. The low option is subject to sharing bands which enable telephone companies choosing a relatively meager productivity target to earn, ultimately, up to 12.75 percent (1.5 percentage points above their authorized rate of return). It also enables them to be compensated for any shortfall below 10.25 percent. Under the middle option, carriers which assume the modest productivity challenge of a 4.7 percent X-Factor are subject to sharing bands which enable them to retain 50 percent of earnings up to 16.25 percent, while still being shielded against profitability shortfalls to the extent earnings fall below 10.25 percent. The high option permits carriers which assume a 5.3 percent productivity challenge to retain whatever earnings they can generate – and provides no cushion for earnings that are below expectations.

Indeed, the record contains substantial evidence that the productivity gains of local exchange carriers in the post-divestiture, pre-price cap era were <u>above</u> the lower X-Factor we are prescribing today.

The Commission's own Frentrup-Uretsky study (now corrected to exclude the aberrational 1984 data point) demonstrates that industry-wide productivity improved at a rate of 5.0 percent per annum over the years from 1985 to 1990. In other words, our own study of post-divestiture, pre-price cap performance demonstrates powerful trends toward increased productivity.

The USTA study is consistent with this finding. If corrected to account for differences in input prices, the USTA study presents highly consistent results – 4.8 percent – over a comparable time frame. Moreover, two of the most experienced state public service commissions, those in New York and in California, have approved or are considering price cap plans with productivity expectations in the 4.6-5.0 percent range.

These numbers are testimony to the prowess of our telecommunications industry and the powerful forces at work in cutting-edge technologies. The phenomenon known as Moore's Law ensures that the cost of computer processing power is halved every 18-24 months. The ever-increasing capabilities and ever-decreasing prices of switches and lasers and a wide array of other equipment provides a solid foundation for continued productivity growth throughout the communications and information industries.

One can, of course, evaluate the numbers in ways that support different conclusions. For example, in its 1990 decision, the Commission averaged the Frentrup-Uretsky study with a longer-term study, the Commission's Spavins-Lande study (1930-1989), which reflected much lower productivity gains.² We now acknowledge, however, the need to revise the Frentrup-Uretsky study, so even the methodology employed in 1990 would compel a new X-Factor and reinitialization requirement that is higher than is being adopted today.³

An only slightly more probing reevaluation of the 1990 decision would justify a more substantial increase in the new low-option X-Factor. In my judgment, the Spavins-Lande study is not entitled to comparable consideration with the far more recent and relevant experience covered in the Frentrup-Uretsky study, so any departures from a 4.1 percent low-

² This average was the foundation for the 2.8 percent productivity factor, which when supplemented by a 0.5 percent "consumer productivity dividend" was the basis for the 3.3 percent low-option X-Factor in the price cap rules over the past four years.

³ The arithmetic average of these two studies, plus the existing 0.5 percent consumer productivity dividend, equals 4.05, or approximately 4.1, percent. This, in turn, justifies a one-time reinitialization of 3.0 or 3.2 percent. The order shaves these numbers downward to a modest degree to reach a predetermined result. These flaws alone have the potential to inflate interstate access prices by \$110 million in the first, and I hope only, year of the interim plan.

end X-Factor and a 3.2 percent reinitialization must logically be in an upward direction.⁴ Indeed, post-price cap studies – using a variety of methodologies – confirm that productivity gains have continued at significantly more than a 4.1 percent rate.

The Commission has previously said that price cap regulation is intended to create added incentives for productivity gains and to ensure that ratepayers share in the resulting benefits. Such objectives cannot be reconciled with the adoption of X-Factors which are based on expectations that the telephone companies' productivity gains under price caps will be lower than they were under rate-of-return regulation.⁵

Nor can the 4.0 percent option be justified by the need to accommodate those companies whose capacity for productivity gains is significantly below the average. For such companies, there is an even lower rung on the ladder: the lower-formula adjustment mechanism.

There are a variety of reasons why certain companies may be unable to match their peers in productivity gains. For example, geography, competition, plant vintages, and quality of management are all real factors that may come into play. Whatever these limitations, our lower-formula adjustment mechanism ensures that these carriers are protected; within specified limits, the price cap index in each year can be increased to offset any earnings shortfall occurring in the preceding year.⁶ Thus, the modest low-option X-Factor adopted today cannot be defended in terms of concern for the lesser performers among the telephone companies.

We must not forget that our telephone companies are preparing to lead the world in the delivery of innovative, sophisticated, cost-effective communications and information services. I am fully confident that they are up to the challenges they will face, including the need to continue to increase productivity and efficiency at a pace greater than is contemplated by the interim plan adopted today.

⁴ For example, a two-third/one-third weighting of the two studies would generate a productivity factor above 4.0 percent. Addition of a 0.5 percent consumer productivity dividend would justify a low-option X-Factor of 4.5 percent and a reinitialization of 4.8 percent.

⁵ Rate-of-return regulation focuses incentive away from efficiency. If the telephone companies were able to achieve productivity gains on the order of five percent per year in the pre-price cap environment, it is anomalous in the extreme for the Commission now to peg the low-end expectations at 4.0 percent, at least in the absence of credible evidence that the carriers' ability to achieve productivity gains is diminishing.

⁶ Some of these factors are within the carriers' control; others are not. Our lower-formula adjustment mechanism is not designed to distinguish on this basis.

Long-Range Objectives. As a matter of context, it is important to emphasize that today's decision is not intended to establish the plan for the next four years of price caps; it is merely an interim plan while we develop a more comprehensive record on certain issues that we have not yet had an opportunity to resolve. Disappointed as I am with the interim plan. I am ready to turn to a discussion of longer-term issues.

As we prepare for the next phase of this proceeding, two issues will be of special importance to me: elimination of sharing and promotion of competition.

I am determined to explore avenues that will enable us to eliminate the "sharing" aspects of price caps. Sharing perpetuates many of the less desirable features of rate-of-return regulation. Eliminating sharing is also a precondition for taking services out from under price cap regulation, as we have done for AT&T when competitive considerations warranted. I firmly believe that we can structure a regime which enables those companies which are willing to step up to the increased risk of a higher X-Factor to enjoy the rewards of keeping whatever profits they can generate.

On the other hand, if we fail to establish the right X-Factors, we cannot responsibly eliminate sharing. Certainly, given the highly cautious manner in which the original X-Factors were established, it is fortunate that the original plan included provisions for sharing.

Regarding competition, the Commission has now decided to modify our price cap goals so as to <u>promote</u>, and not only replicate the effects of, competition in interstate access and other local communications services. I firmly support this decision. Whenever and wherever possible, I am committed to replacing regulation with competition. At the same time, I recognize that introducing competition where it currently is lacking cannot be achieved by wishful thinking.

<u>Conclusion</u>. As we continue our efforts, we have a responsibility to manage the transition carefully. We must avoid overregulation. Equally important, we must not abdicate our responsibilities while there remain significant problems of market power.

I know that we will confront many difficult issues as we move to the next step of the process. I look forward to the debate.

SEPARATE STATEMENT OF

COMMISSIONER RACHELLE B. CHONG

Re: Price Cap Performance Review for Local Exchange Carriers, First Report and Order, CC Docket No. 94-1

By this First Report and Order, the Commission makes important modifications to its scheme of price cap regulation for local exchange carriers ("LECs"). These changes are made after four years of experience with LEC performance under the Commission's initial price cap regime. The revised interim plan adopted in this decision contains significant improvements that, in my judgment, should more fully serve the public interest goals underlying price caps. I write separately to express my strong support for this item, and to touch on a few of the modifications and their relationship to our goals.

First, a price cap scheme of regulation should ensure rates that are just, reasonable and not unduly discriminatory. In this decision, we further this fundamental goal by reassessing our calculations regarding LEC productivity that served as the basis for setting the initial rates under price caps in 1990. Specifically, we revisit our 1990 decision to include in our calculations access price data for the 1984-1985 tariff year. This specific data emerged from the most tumultuous year in the history of American telecommunications, when AT&T – the largest corporation the world has known – was dramatically restructured. The so-called "1984 data point" varied significantly from data relating to the other years considered in the study. Inclusion of the 1984 data point had a substantial downward impact on the Frentrup-Uretsky study's overall measure of LEC productivity. This study, in turn, resulted in the selection in 1990 of a lower annual productivity offset – or so-called "X-Factor" – for the LECs.

Record evidence submitted in this docket now calls into question the Commission's original judgment in 1990 to include the 1984 data point in its initial productivity calculations. Indeed, this new evidence – aided by the acuity of hindsight – now persuades us that the Commission erred by considering this data back in 1990. We correct this error in this decision for an important policy reason. By correcting our error on a prospective basis, we ensure that future rates are not impacted by what we can now see is an anomalous 1984 data point. This correction involves two changes: (1) an upward adjustment to relevant X-Factors; and (2) a one-time downward adjustment to the LECs' price cap indices. These corrections should more effectively ensure just and reasonable rates for consumers in the future.

Second, to the extent possible, our price cap rules should sever the link between prices and traditional notions of rate-of-return regulation. Some parties have criticized the Commission's initial price cap regime for LECs because it employs two "backstop" mechanisms – the sharing and low-end adjustments – which potentially are triggered by an individual LEC's reported rate-of-return. Under the sharing mechanism, reported earnings that exceed certain thresholds established by our rules must be returned, in whole or in part, to consumers. Conversely, earnings that fall below a certain threshold entitle a LEC to increase rates through the low-end adjustment mechanism. LECs argue strenuously that grafting rate-of-return mechanisms such as these onto our price cap regime blunts the profit incentives that animate a price cap world.

During this proceeding, I have challenged the notion that sharing must continue to play a role in the scheme adopted in this decision. My belief is that sharing can work at cross-purposes to the profit incentives underlying price caps. In this proceeding, I heard from the staff and many parties – including some LECs – that sharing is a necessary, if unwelcome, component of any price cap scheme involving multiple X-Factor options. The evidence supports multiple X-Factor options, given the wide divergence of LEC performance under price caps. Absent sharing on the low or middle X-Factor options, I was told, a LEC would have no incentive to elect a more challenging X-Factor – even if the higher X-Factor was legitimately within the LEC's reach. Over time, I was persuaded by this argument and concluded that it is not feasible at this point to do away with sharing completely. I therefore have come reluctantly to accept the need to retain sharing and the low-end adjustment in the interim plan. I want to be clear, however, about my long-term goal for price cap regulation – my preference is to sound the death knell for sharing, and for other vestiges of rate-of-return regulation.

With this decision, I am pleased that the Commission takes a step – albeit a cautious one – away from the prior plan's reliance on rate-of-return backstops. I recognize that this interim plan, in some respects, contains elements of rate-of-return regulation, primarily sharing, in two of the X-Factor options. I find it significant that in this interim plan the LECs will have the option, for the first time, to elect a higher annual X-Factor that does not contain these rate-of-return mechanisms. I believe this is in the public interest because the prospect of higher earnings should act as an incentive to LECs to select the most challenging X-Factor and to strive to increase efficiency. Meanwhile, consumers will benefit by the resulting reductions in access charges.

Third, our price cap scheme should encourage LEC productivity to the maximum extent possible, while recognizing that individual LECs face different competitive and economic circumstances that affect their ability to achieve a single industry-wide productivity target. To this end, we have modified the current two-option X-Factor approach by adding another X-Factor option between the lowest and highest productivity offsets. The options of the interim plan offer gradations of sharing: fairly strict sharing the lowest option, more lenient sharing in the middle, and no sharing associated with

highest X-Factor. Carriers now have additional choices and the incentive to self-select the X-Factor that most closely resembles their ability to achieve productivity gains.

The prospect of being able to retain higher earnings by selecting a more challenging X-Factor offers strong incentives for carriers to move up the X-Factor continuum. Again, the selection of higher X-Factors should offer consumers benefits in the form of lower access charges. Those carriers that cannot meet more challenging X-Factors, due to short run competitive circumstances, regional economic pressures or other reasons, may find it necessary to select the lowest X-Factor. Presumably, carriers in such circumstances will not achieve high earnings and thus will incur little if any sharing obligation. Carriers that believe they can accept the most challenging productivity offset should select the highest X-Factor. And carriers somewhere in the middle of these outer productivity boundaries have yet another option. In short, the plan recognizes that LECs are heterogeneous in terms of productivity, and offers more choices to carriers to reflect that diversity. This approach is consistent with one of my basic regulatory tenets: to craft flexible regulations that are adaptable to differing and changing circumstances.

In addition to adopting an interim plan in this decision, we will soon be issuing a further notice of proposed rulemaking in this docket to consider transitional and long-term issues regarding our LEC price cap regime. I urge that we carefully consider what our regulatory regime should look like at the end of the millennium and into the twenty-first century. We must develop a forward-looking blueprint to guide the transition from price cap regulation to more flexible, streamlined regulation as competition evolves in the provision of interstate access services.

The emergence of competition, and its implications for regulation, should be a central focus of this further proceeding. As competition begins to take hold in a particular geographic or service market, our rules should provide increased flexibility to the LECs to compete fairly for interstate access business. While price cap regulation is designed, to the extent possible, to replicate a competitive marketplace, any form of regulation is an imperfect surrogate for full-fledged competition. Where it can be shown that a particular market is fully competitive, our regulation should give way to competitive market forces to ensure that rates are just, reasonable, and not unduly discriminatory. To achieve this goal, we must develop workable, objective criteria to measure the extent of effective competition. This is a difficult challenge, but one I believe we can meet with the help of the parties. We simply need to get on with it.